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**BUFFALO  
PITTS**

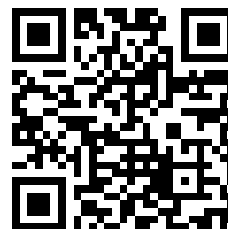
**ENGINES.  
THRESHERS.**

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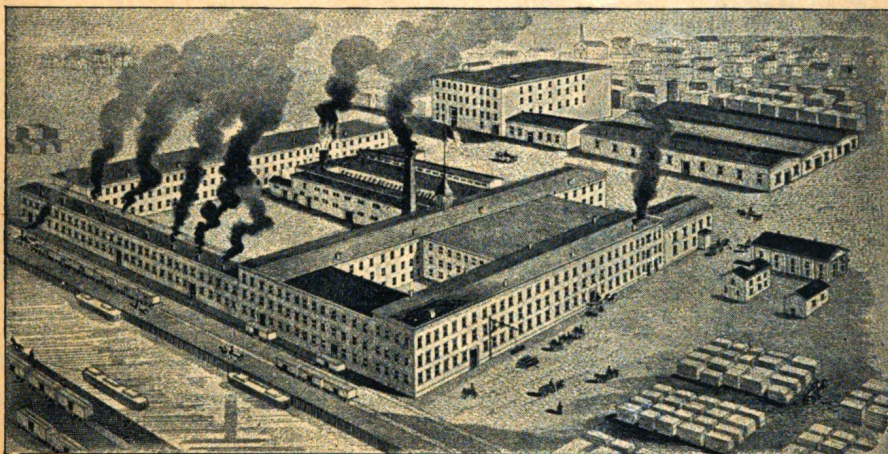
ESTABLISHED 1851.

INCORPORATED 1877.

1894.

FORTY-FOURTH YEAR.

ILLUSTRATED CATALOGUE  
OF  
BUFFALO PITTS  
Engines and Threshers



FACTORY: BUFFALO, N. Y., WITH OVER FIVE ACRES OF FLOOR SPACE. SHIPPING FACILITIES: TWENTY-SIX  
LINES OF RAILROAD CENTER AT BUFFALO, GIVING US UNSURPASSED FACILITIES FOR QUICK,  
COMPETITIVE SHIPMENT TO EVERY POINT IN THE UNITED STATES.

The Pitts Agricultural Works,

BUFFALO, N. Y., U. S. A.

Officers:

CARLETON SPRAGUE, PRESIDENT AND TREASURER.

C. M. GREINER, SECRETARY.

J. B. OLMSTED, ATTORNEY.

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## INTRODUCTION.



NOTHING in many years has more fully testified to the popularity of Buffalo Pitts Engines and Threshers, than the fact that, although other manufacturers of threshing machinery were unable to sell but a small part of their product during the past season, we sold our average number of both engines and threshers. So great was the demand that we ran our shop full time all through the summer, not reducing our force until the middle of October.

Never, in the history of our business, have all our machines given more universal satisfaction to customers, both in construction and field work, than during the summer of 1893.

AS A CONSEQUENCE, WE HAVE, FOR THE COMING SEASON, NOTHING BUT NEW MACHINES TO SELL, AND FEELING CONFIDENCE IN THE FUTURE, WE ARE PROPOSING TO INCREASE OUR OUTPUT IN ABOUT THE SAME PROPORTION AS DURING THE LAST TEN YEARS.

We claim for all our machinery that, in mechanical construction and durability, they are unequaled, and that in field work, in all kinds and conditions of grain, they stand in the lead.

It is easy for any man to design a threshing machine which *looks* as if it would work perfectly, but remember that Buffalo Pitts machines are the result of forty-four years of successful work in shop and field, and that they are not, therefore, experiments in any sense of the word. Each year has seen some changes and improvements, all looking to better machines and better work. Our field record is our best testimonial, and we look forward to continued success in the future.

We are always glad to hear from interested persons, whether they contemplate buying or not, and extend our thanks to all our customers for their patronage in the past.

## THE PITTS AGRICULTURAL WORKS.

# DESCRIPTION OF STRAW BURNERS.

Table of Dimensions of the Buffalo Pitts Straw-burning Engines.

Style of Engine	No. of Engine	Horse Power	CYLIN- DER		BOILER								FLY WHEEL		Revolutions per Minute	TRAC- TION WHEELS		
					FIRE BOX			SHELL	FLUES			MAIN FLUE						
			Diameter in Inches	Length of Stroke in Inches	Height in Inches	Length in Inches	Width in Inches		Diameter in Inches	Number	Diameter in Inches	Length in Inches	Diameter in Inches	Length in Inches	Diameter in Inches			Width of Face in Inches
Plain, mounted on Iron Wheels	S. B. 15	15	8½	10	36½	38	26	33½	19	3	102	14	60	40	9	250	...	...
	S. B. 18	18	8¾	10	37½	36	27½	35½	20	3	108	15	69½	40	9	250	...	...
Traction	S. B. 12	12	8	10	38	36	23½	29½	15	3	96	12	56	40	9	250	66	14
	S. B. 15	15	8½	10	36½	38	26	33½	19	3	102	14	60	40	9	250	66	16
	S. B. 18	18	8¾	10	37½	36	27½	35½	20	3	108	15	69½	40	9	250	66	18

Our 18-Horse Straw Burner will develop 20-horse power and drive any thresher in the world.

**BUFFALO PITTS TRACTION STRAW-BURNING ENGINES FOR 1894.**—We believe it is acknowledged that we build the greatest number of sizes in traction engines of any makers in the market. We have given more time to and made more experiments on straw-burning engines than any other makers, with the result that in all parts of Minnesota, Dakota, Iowa, California, Washington and Oregon, the Buffalo Pitts Straw Burners take the lead.

We believe that, to burn straw successfully, you must have large boiler capacity, so as to have a surplus of steam at all times. More straw-burner engines have failed on this account than any other.

We invite your careful attention to our table of dimensions of straw burners, believing that we give more for the money, and that our engines are rated at less horse power, compared with the amount they will really develop, than will be found in any other similar list.

The boilers of these engines, like our coal burners, are made of steel, 60,000 lbs. tensile strength, and tested at 225 lbs. hydrostatic pressure. On page 9 will be found an outline cut of the boiler, showing the independent smoke-box end, and the general design of the boiler. This smoke box we have used for the past four or five years, and it is the only device we have found successful on a



return-flue boiler. Purchasers who will look into the matter, will convince themselves that this alone makes our engines superior to any other straw-burner boiler. The boiler being flanged in at the smoke-box end, makes it impossible for the seams to leak at that vital point of the boiler. We have not had a single complaint of the smoke-box end since we put it on independently.

For 1894 we build three sizes of these engines, viz.: 12-horse power, 15-horse power and 18-horse power. All of them are side crank engines, except the 18-horse, which is center crank. Each engine will develop very much more horse power than that at which we rate it.

**12-HORSE TRACTION STRAW BURNER.**—The shell of this boiler is  $29\frac{1}{2}$  inches diameter,  $\frac{5}{16}$  inch thick, fitted with our patent independent smoke-box end. The dome is 14 inches diameter, 24 inches high. The fire box is  $\frac{9}{32}$  inch thick. The cylinder is  $8 \times 10$  and the engine is the side crank pattern, the crank shaft being  $2\frac{3}{4}$  inches diameter with 20-inch balance face crank; the countershaft is  $2\frac{1}{8}$  inches diameter; both made of cold-rolled steel. This engine, like all the engines we build, is furnished with friction clutch, and 100-gallon water tank on front end of boiler. The traction wheels are made of wrought steel with malleable lugs, 66 inches diameter, 14 inches face. The front wheels are 5 inches face. We furnish, with this engine, and the 15-horse engine, cross head pump and injector. The Marsh pump we furnish with the 18-horse only.

**15-HORSE TRACTION STRAW BURNER.**—The shell of this boiler is  $33\frac{1}{2}$  inches in diameter,  $\frac{1}{8}$  inch thick, fitted with our patent independent smoke-box end. The dome is 28 inches high, 16 inches diameter. The fire box is  $\frac{3}{8}$  inch thick. The other dimensions will be found in the foregoing table. The cylinder of this

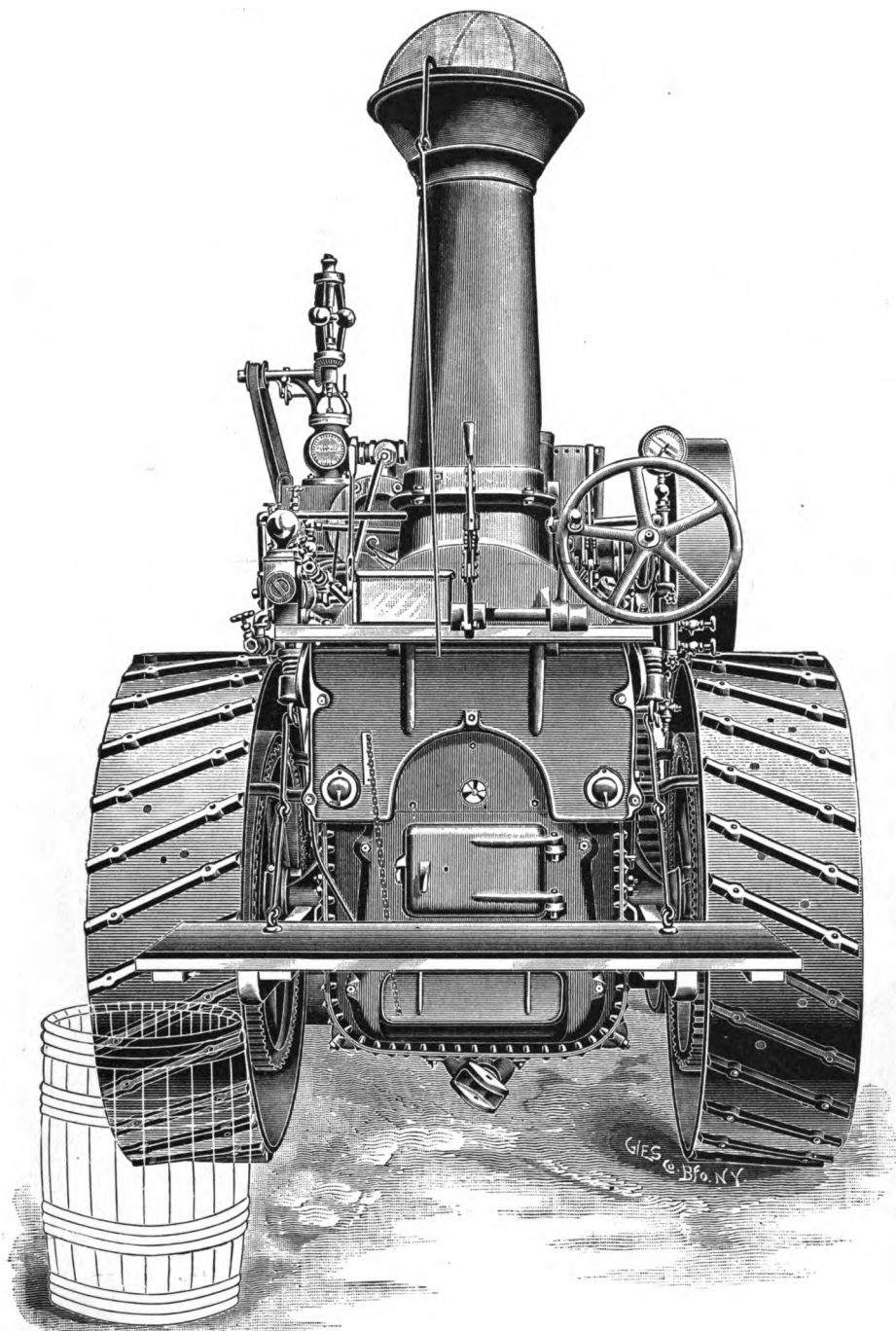
engine is the same as last season,  $8\frac{1}{2} \times 10$ . The engine is of the side crank pattern, the crank shaft being  $2\frac{3}{4}$  inches diameter, with 20-inch balance face crank; countershaft  $2\frac{3}{8}$  inches diameter. The engine is furnished with friction clutch; 100-gallon water tank on front end of boiler. The traction wheels are made of wrought steel with malleable lugs, 66 inches diameter, 16 inches face. The front wheels are 48 inches diameter, 6 inches face. The engine is complete in every particular, with Pickering governor, brasses and all necessary parts.

**18-HORSE TRACTION STRAW BURNER.**—The diameter of the boiler for this engine is  $35\frac{1}{2}$  inches. The dome is 29 inches high, 16 inches diameter. The other dimensions of the boiler will be found in the table on the preceding page and the description on page 9. The engine is of the center crank pattern,  $8\frac{3}{4} \times 10$  cylinder, crank shaft  $3\frac{3}{8}$  diameter, countershaft  $2\frac{3}{4}$  diameter. This engine is complete with friction clutch, 40-inch diameter fly wheel, and for this season we furnish, on this size only, Marsh independent pump, illustrated and described on page 10. The traction wheels are 66 inches diameter, 18 inches face. The front wheels are 48 inches diameter, 8 inches face.

**PLOWING ATTACHMENT.**—For any of the engines we build, we can furnish, at a reasonable price, draw bar for plowing, and believe it is practicable to plow successfully by steam, if too much work is not expected of the engine.

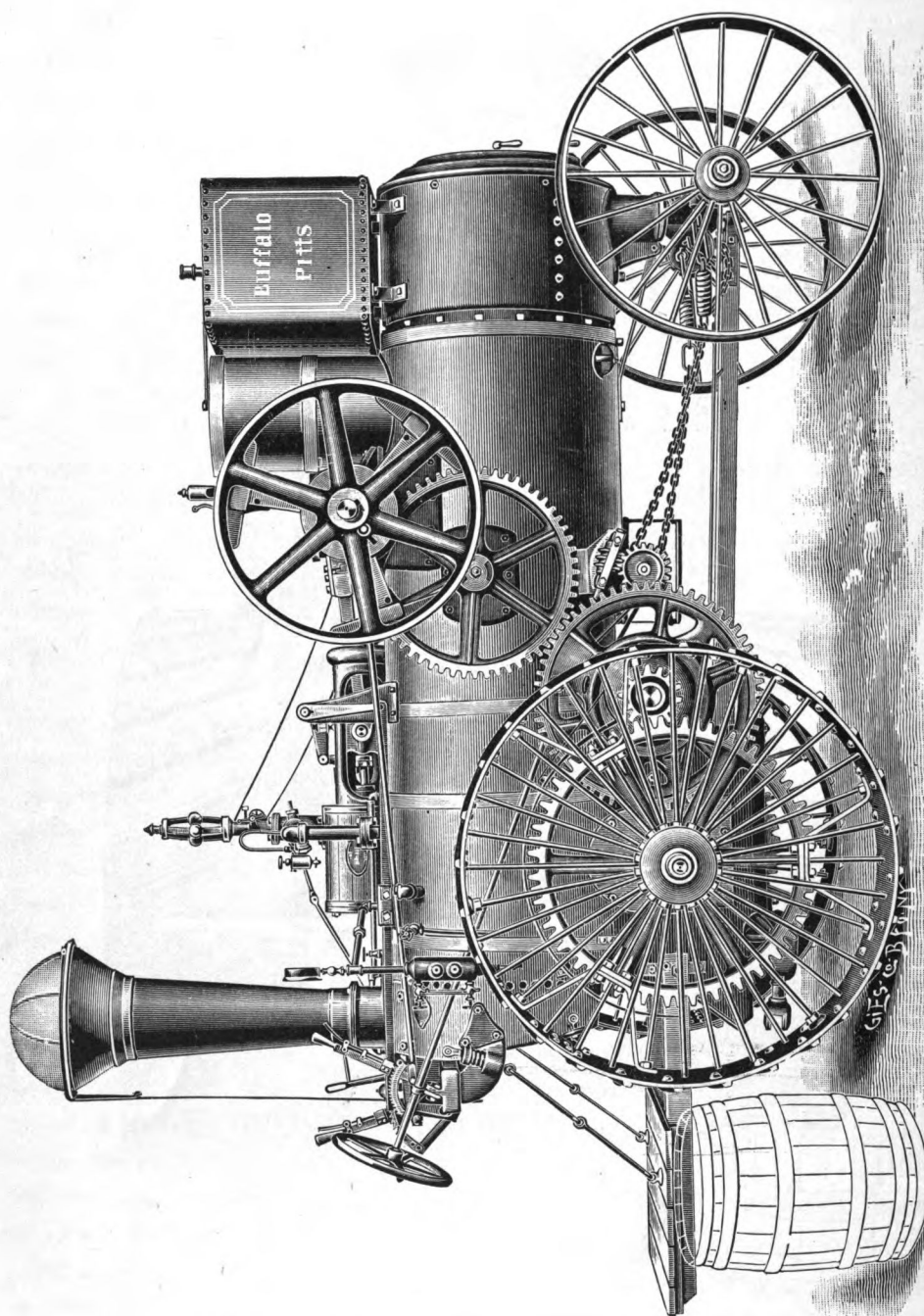
We have only given a brief description of these straw-burning engines, as they are so well known throughout the whole of the Northwest. We build the largest straw burner on the market, believing that ample power, wide, high wheels and very large boiler are essential to the success of any straw-burning engine.



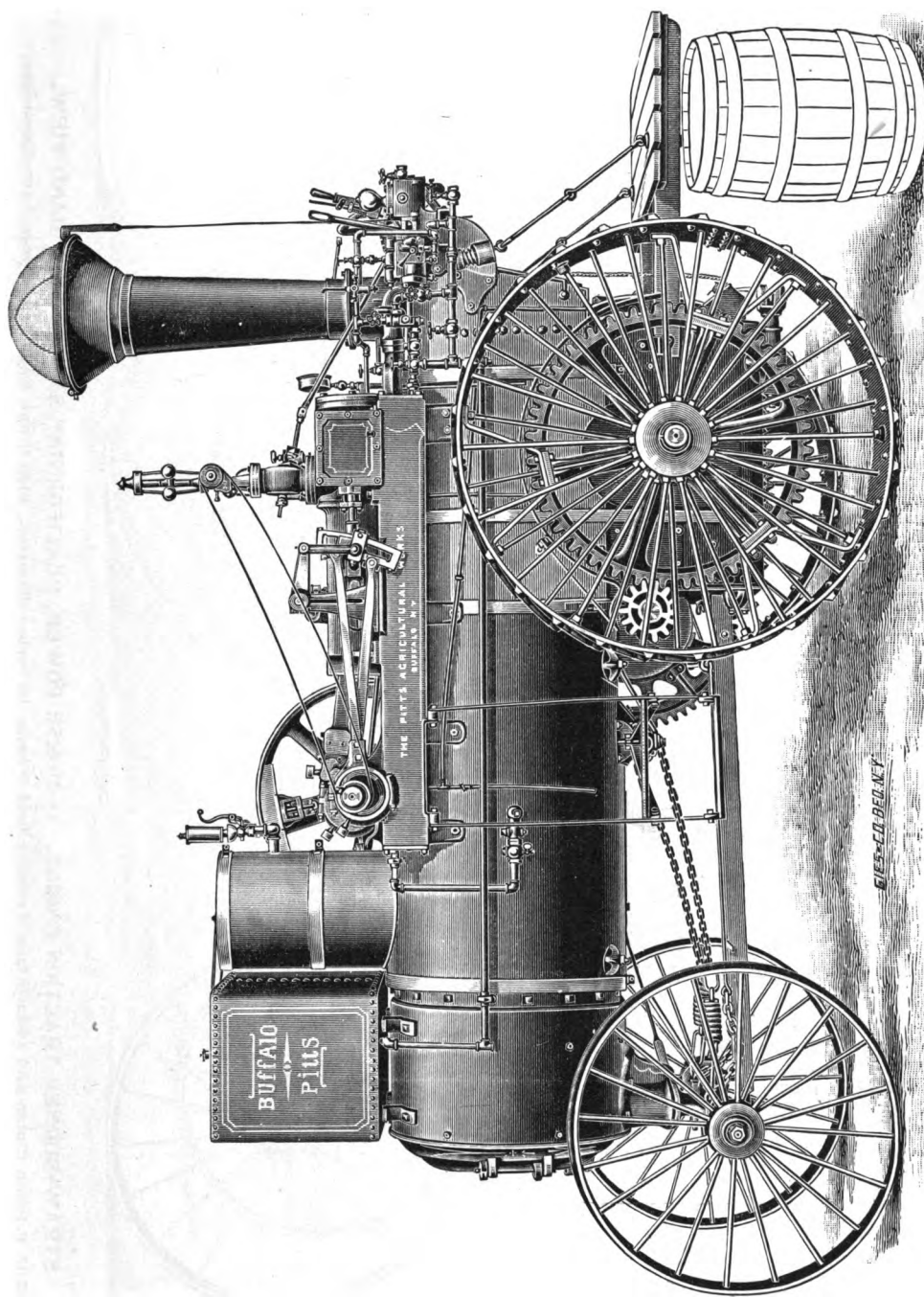


**18-HORSE STRAW-BURNER TRACTION ENGINE. END VIEW.**

**Showing 18-inch face, 66-inch diameter Steel Wheels, with Malleable Iron Lugs.**

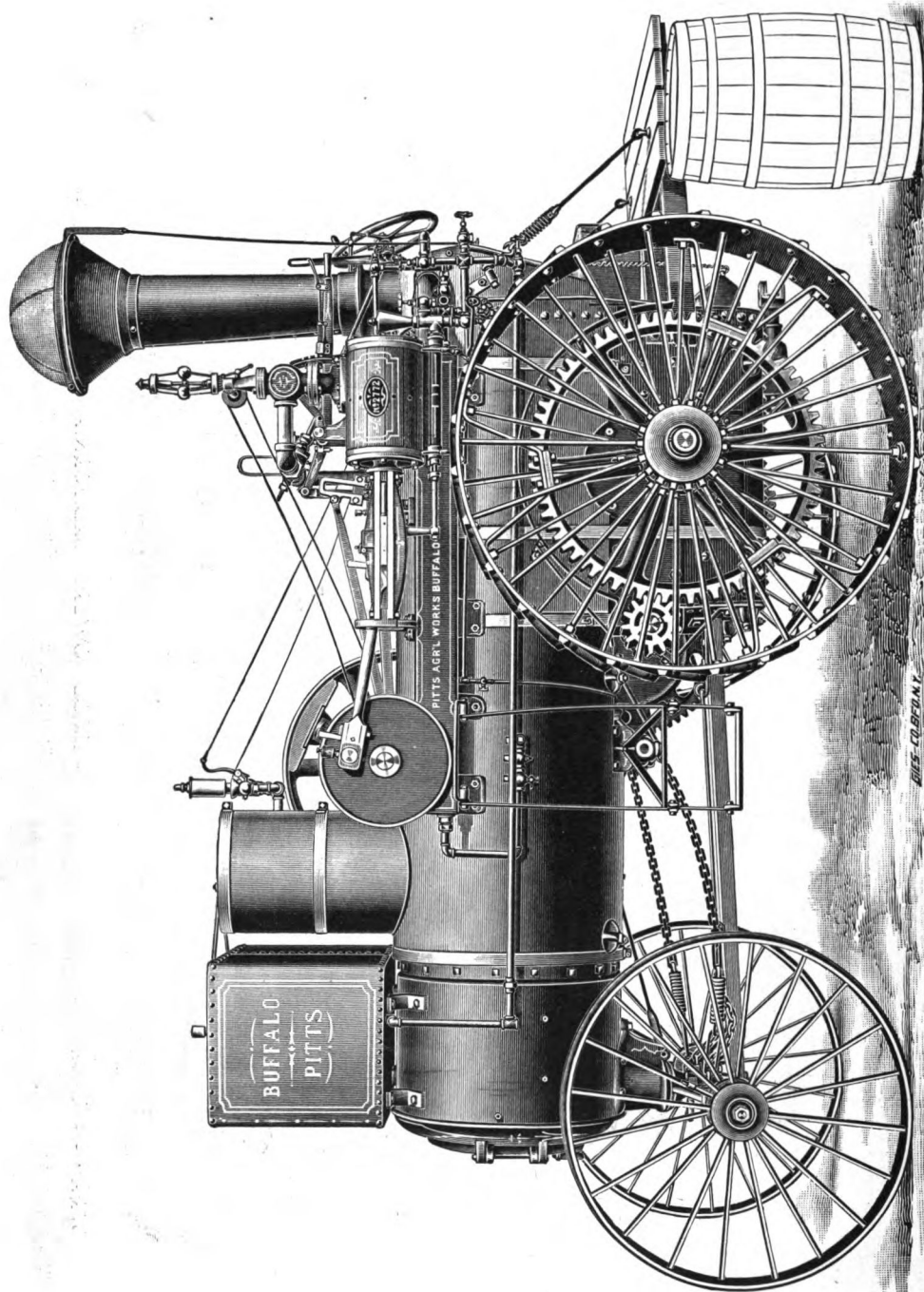


**STRAW-BURNER TRACTION ENGINE. 18-HORSE POWER, "CALIFORNIA" STYLE. RIGHT-HAND VIEW.**  
With Friction Clutch and 18-inch face Wrought Steel Wheels, 66 inches diameter. Center Crank Engine. See page 3 for dimensions.



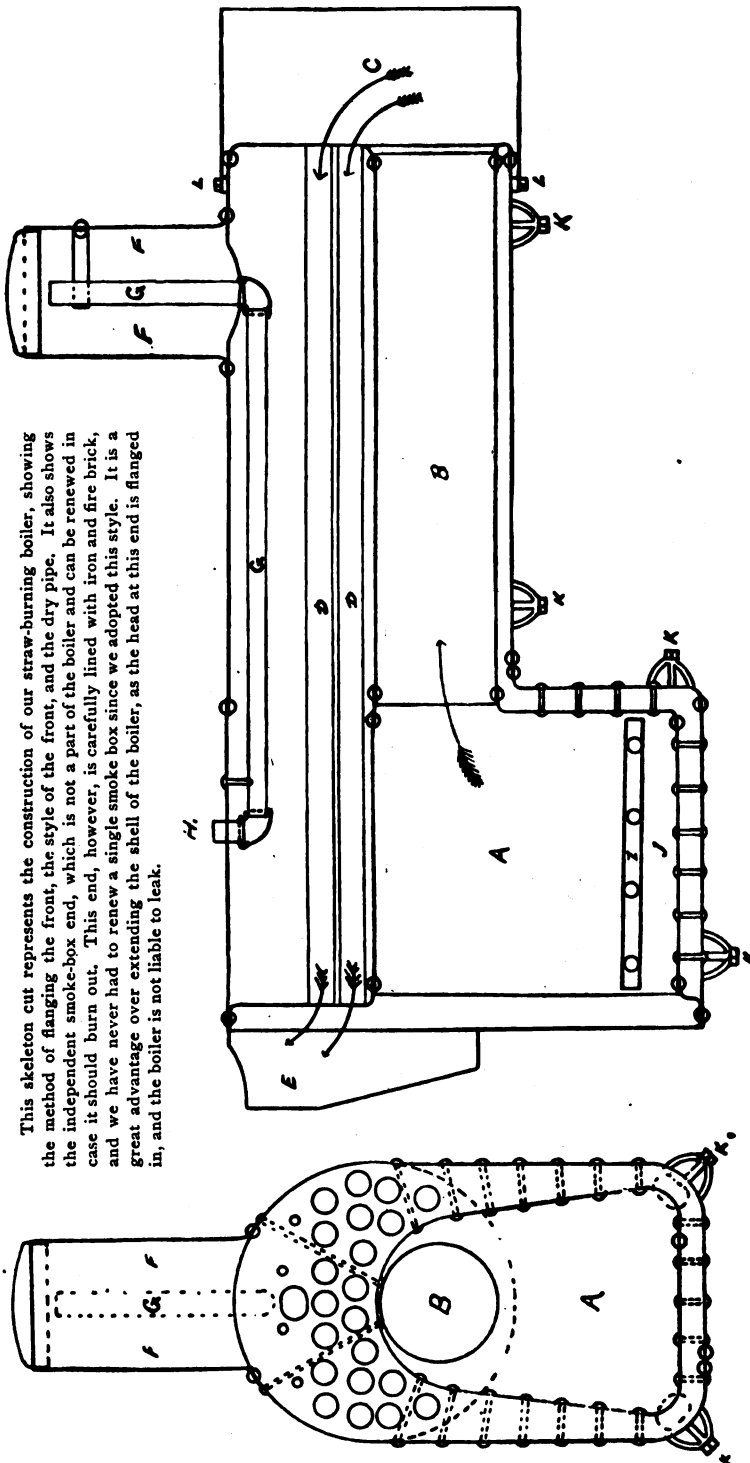
**STRAW-BURNER TRACTION ENGINE. 18-HORSE POWER, "CALIFORNIA" STYLE. LEFT-HAND VIEW.**

**With Friction Clutch and 18-inch face Wrought Steel Wheels, 66 inches diameter. Center Crank Engine. See page 3 for dimensions.**



STRAW-BURNER TRACTION ENGINE. 15-HORSE POWER, "CALIFORNIA" STYLE. LEFT-HAND VIEW.  
 With Friction Clutch and 16-inch face Wrought Steel Wheels, 66 inches diameter. Side Crank Engine. See page 3 for dimensions.

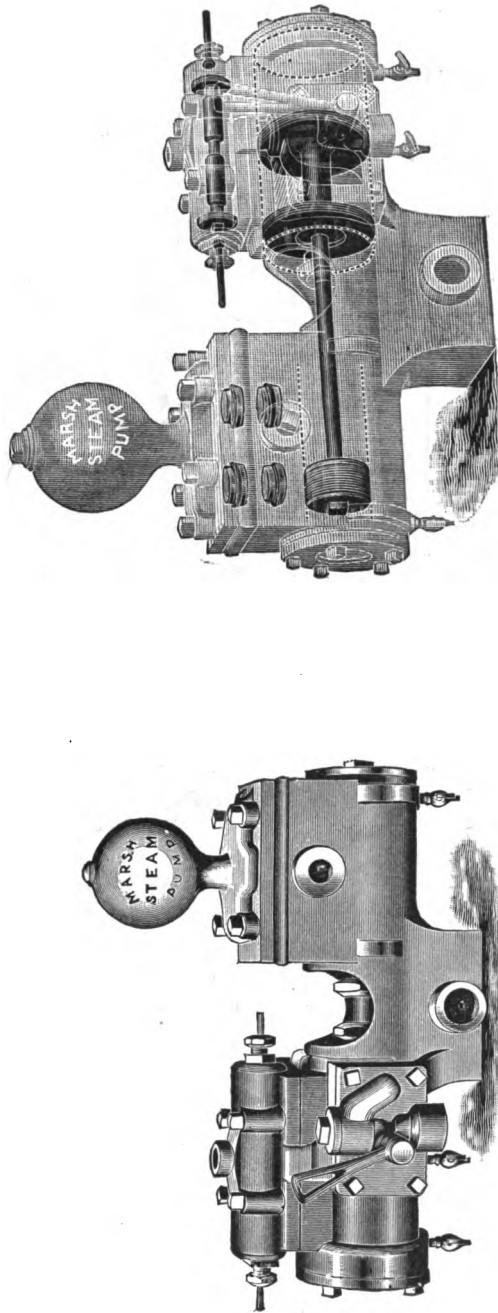




This skeleton cut represents the construction of our straw-burning boiler, showing the method of flanging the front, the style of the front, and the dry pipe. It also shows the independent smoke-box end, which is not a part of the boiler and can be renewed in case it should burn out. This end, however, is carefully lined with iron and fire brick, and we have never had to renew a single smoke box since we adopted this style. It is a great advantage over extending the shell of the boiler, as the head at this end is flanged in, and the boiler is not liable to leak.

# **BUFFALO PITTS PATENT STRAW-BURNER BOILER.**

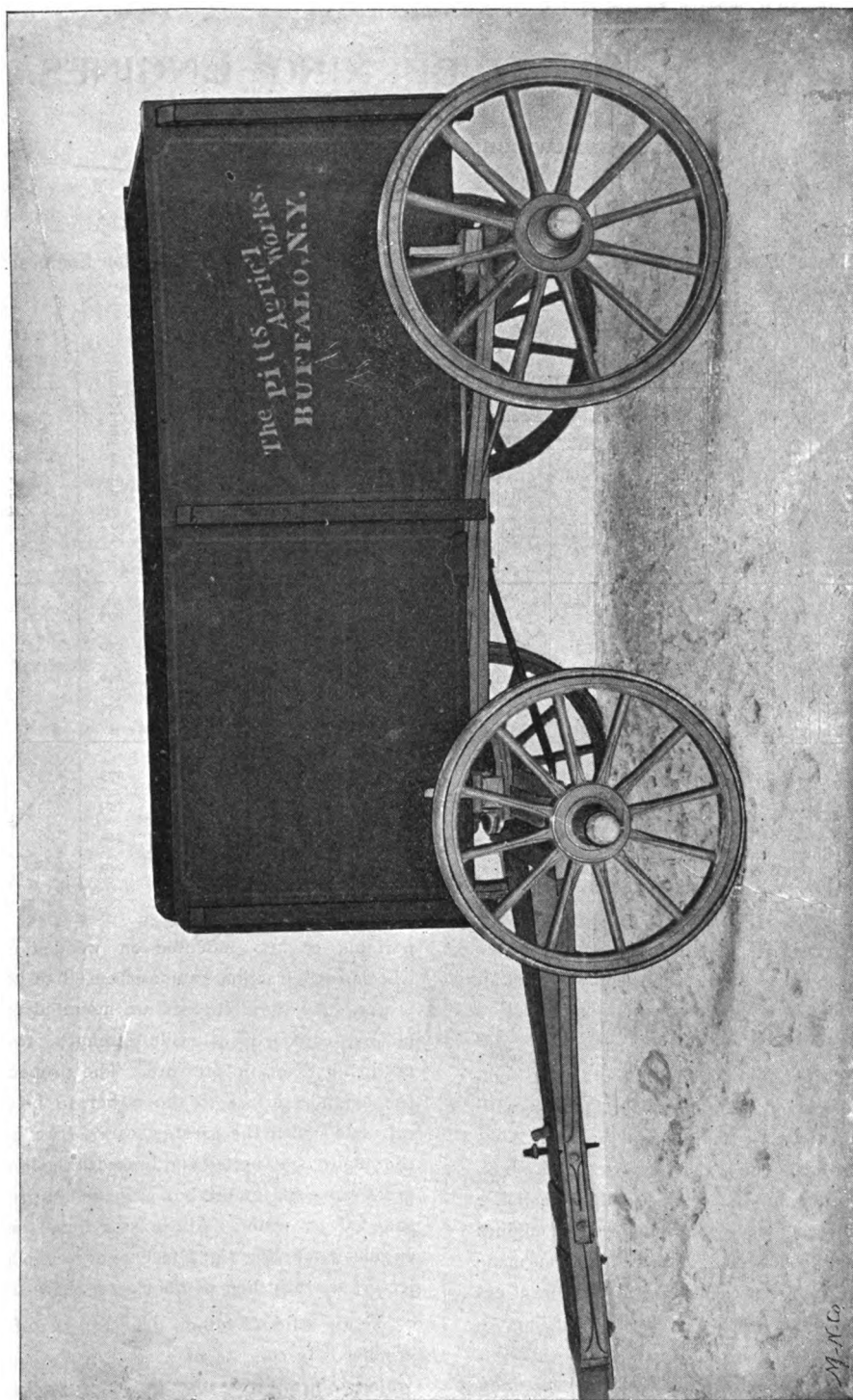
Patented November 11, 1890.



### THE IMPROVED MARSH STEAM PUMP.

These cuts show the Improved Marsh Steam Pump, which we have adopted after becoming satisfied it is the best independent boiler feeder for traction engines now offered to the trade. This pump will be furnished the coming season on our 18-horse straw-burner engines, only.

The outline cut is intended to express the simplicity of the mechanism employed. The darker portions show the moving or working parts in their proper relative positions. The action of each part is independent of auxiliary appendages, and it is obvious that great simplicity has been attained in perfecting this pump.



**COAL AND WATER WAGON FOR TRACTION ENGINES.**  
Furnished with Pump and Hose, extra.

# COAL OR WOOD-BURNING ENGINES.

FOR STRAW BURNERS, SEE PAGE 3, ETC.

Table of Dimensions of Buffalo Pitts Coal or Wood-burning Plain or Traction Engines.

Style of Engine	No. of Engine	Horse Power	CYLIN- DER		BOILER							FLY WHEEL		Revolutions per Minute	TRACTION WHEELS	
			Diameter in Inches	Length of Stroke in Inches	FIRE BOX			SHELL  Diameter in Inches	FLUES			Diameter in Inches	Width of Face in Inches		Diameter in Inches	Width of Face in Inches
					Height in Inches	Length in Inches	Width in Inches		No.	Diameter in Inches	Length in Inches					
Plain Engines mounted on Wheels or Skids	8	8	6½	9	32	32	21	26	30	2	60	36	6½	275	.....	.....
	10	10 to 12	7¾	10	33	36	23	27	36	2	66	36	8½	250	.....	.....
	15	15	8½	10	34½	40	25	30	41	2	72	40	8½	240	.....	.....
	20	20	9	10	38	44	29	33	54	2	76	40	10½	240	.....	.....
Traction Engines.	8	8	6½	9	32	32	21	26	30	2	66	36	6½	275	55	8
	10	10 to 12	7¾	10	33	36	23	27	36	2	66	36	8½	250	60	12
	15	15	8½	10	34½	40	25	30	41	2	72	40	8½	240	66	16
	20	20	9	10	38	44	29	33	54	2	76	40	10½	240	66	18

**BUFFALO PITTS ENGINES.**—In the above table will be found sizes, dimensions, etc., of all the coal and wood-burning plain and traction engines we build.

We ask a careful examination of table comparing the size of the Buffalo Pitts boiler with those furnished by other manufacturers, and we think it will be found that, in size of fire box, length of tubes and diameter of shell, more boiler is given for the money in Buffalo Pitts engines than in any other on the market. The name "Buffalo Pitts" represents the leading farm engine in the country to-day. The kinds of engines we furnish, as shown in the illustrations in this catalogue, are semi-portable and skid engines,

portable engines mounted on wooden or iron wheels, and traction engines from 8 to 20-horse power. All these engines are mounted on steel boilers, 60,000 lbs. tensile strength, tested at 225 lbs. hydrostatic pressure. The proportion of the heating surface to the power to be used is calculated with the greatest care. The boiler is thoroughly stay bolted and braced, the dome is of great capacity, the fire box large and entirely surrounded by water. All brasses found on these engines, including sight feed oiler, pump and injector, are furnished without extra charge.

We use solid oil cup on the eccentrics of all our engines. It consists of a cap, in the center of which is firmly cast a screw fitting into a thread



cut in the lower part. The cup is filled with solid oil, which is forced into a groove made by screwing the top down upon the lower part, and is spread by the revolving of the shaft. The periphery of the lower part is filled with packing, making a tight joint and protecting it from dust.

**8-HORSE TRACTION ENGINE.**—We build this the same as last season, with cast-iron road wheels, 8 inches wide, 55 inches diameter. We aim to build this for a very light traction engine, for small machines in hilly districts.

**10 TO 12-HORSE TRACTION ENGINE.**—We call particular attention to this sized engine, and ask that purchasers compare the size of the cylinder and the diameter of the boiler, number of tubes, etc., with those of other makes. They will find that although it is rated at from 10 to 12-horse power, the Buffalo Pitts engine of this rating is equal in size and power to almost any 15-horse engine on the market. We have materially improved this engine for 1894 by substituting for cast-iron wheels, both front and rear, steel wheels of the same improved pattern as we have used this past season on our 15-horse traction engine. We use 12-inch face wheels, the widest furnished by any manufacturer on this sized engine, and the wheels are 60 inches diameter. The front wheels are 5-inch face, made of wrought steel.

This engine is a most useful size, being very strong and capable of driving any of our 36 x 52 threshers. It is fitted with a friction clutch of the latest pattern, simple in design and effective in working capacity. A 100-gallon water tank is put on the front end of the boiler, and is filled by pump or injector, at the option of the engineer. The engine is provided with Pickering governor, handsome design smoke stack, patent throttle, etc., etc. It is fitted with heavy crank shaft,  $2\frac{3}{8}$  inches diameter; countershaft  $2\frac{3}{8}$  inches diameter, cold-rolled steel; and large face crank, 20 inches diameter.

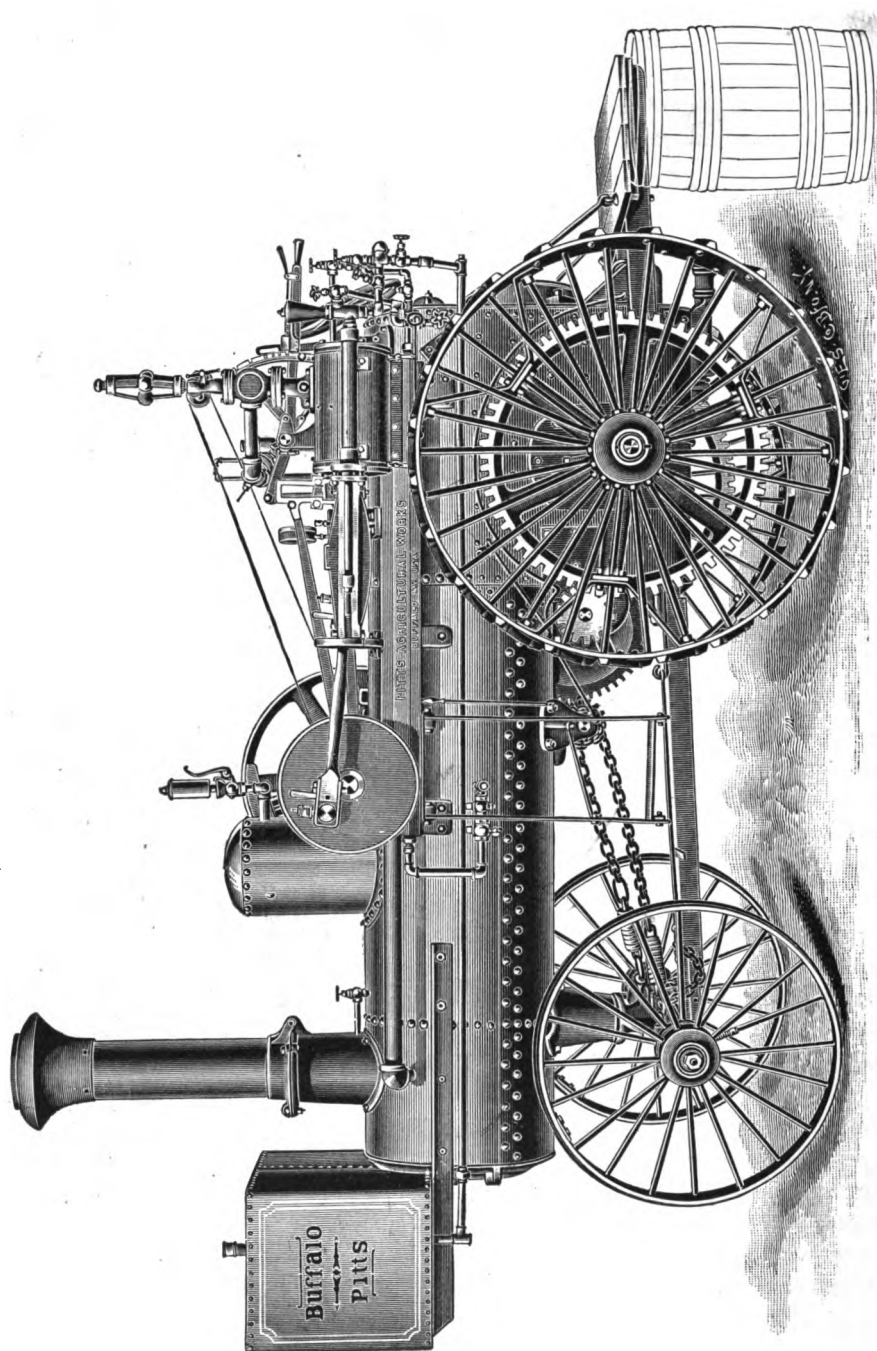
**15-HORSE TRACTION ENGINE.**—We make another step forward by providing our cus-

tomers with the very best thing for a strong farm engine, to drive the biggest thresher built, with all the attachments that any one can put on it. If you want an engine that will always have lots of power and that will outlast any two cheaply-built engines in the market, you will make no mistake in buying this size.

In the first place we have increased the diameter of the boiler to 30 inches and the diameter of the cylinder to  $8\frac{1}{2}$  inches. Like the 10 to 12-horse engine, this engine is provided with steel wheels, 16 inches face, 66 inches diameter. The front wheels on this engine are 6 inches face, made of wrought steel. As on the 10-horse engine, we furnish Pickering governor; large water tank. The crank shaft is  $2\frac{3}{4}$  inches diameter; the countershaft  $2\frac{1}{8}$  inches diameter, cold-rolled steel; face crank, 20 inches. For illustrations of this sized engine and the 10 to 12-horse, we refer you to pages 14, 15, 16, and know that these engines themselves exceed in appearance any illustrations that can be made of them.

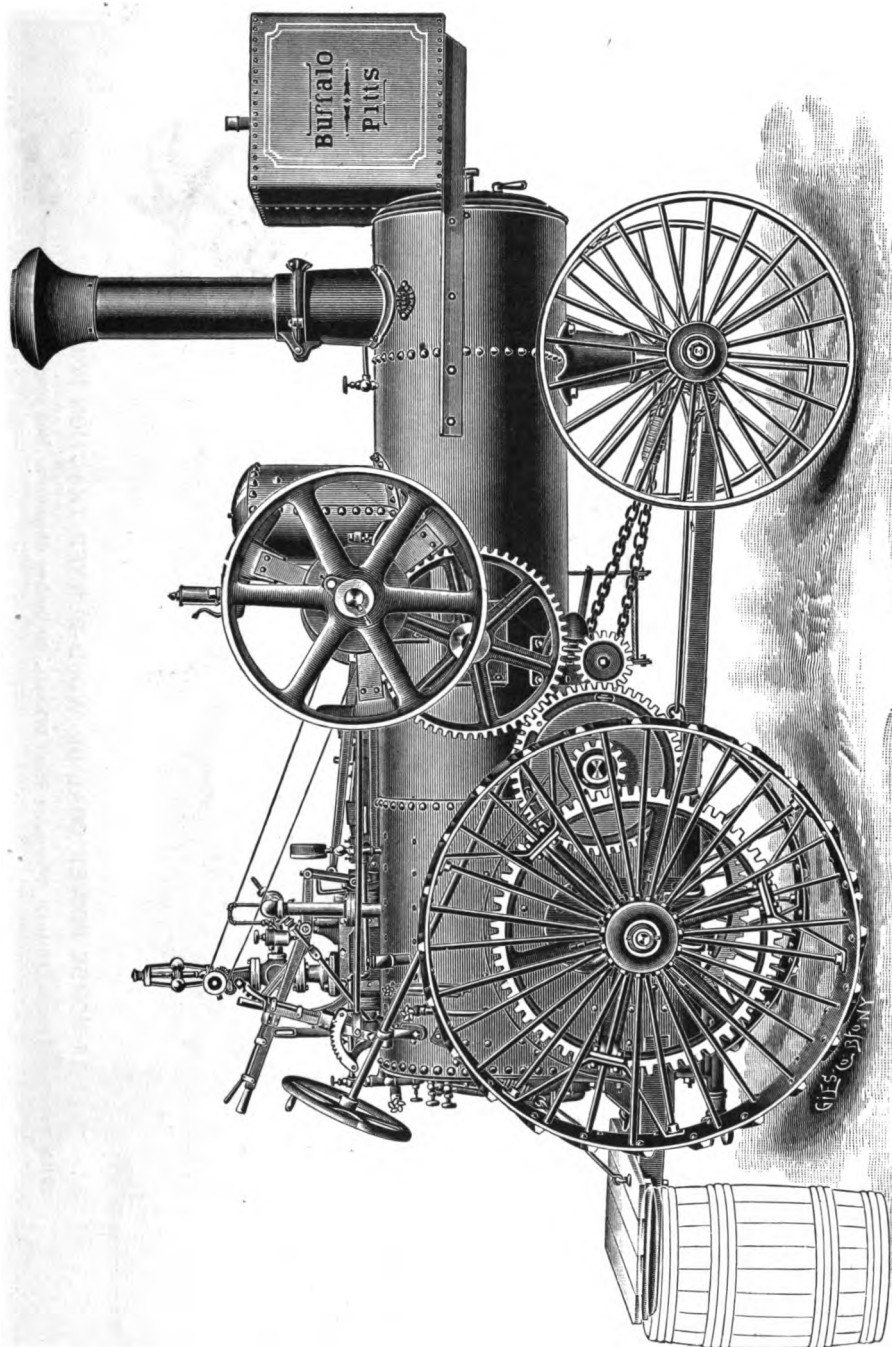
**20-HORSE TRACTION ENGINE.**—We sold a number of these engines last season. They are designed to be used with only the largest sized machines, and where purchasers want a large surplus of power, so that they can be prepared to do a large amount of work at any and all times. The engine, as will be seen in the illustration, is of the center crank pattern, has wrought steel wheels 18 inches face and 66 inches diameter. Wherever this sized engine has been introduced it has given the very best satisfaction, and fills the demand for the largest sized traction engine that any man may wish to buy.

On all our engines the steering attachment is on the right-hand side, springs are put on the platform rods, and by examining the illustrations it will be seen that the engines are complete in the smallest particulars. There are thousands of them in use, and we believe we are building, this season, not only the largest line of engines, but the best engine we have ever made in our works.

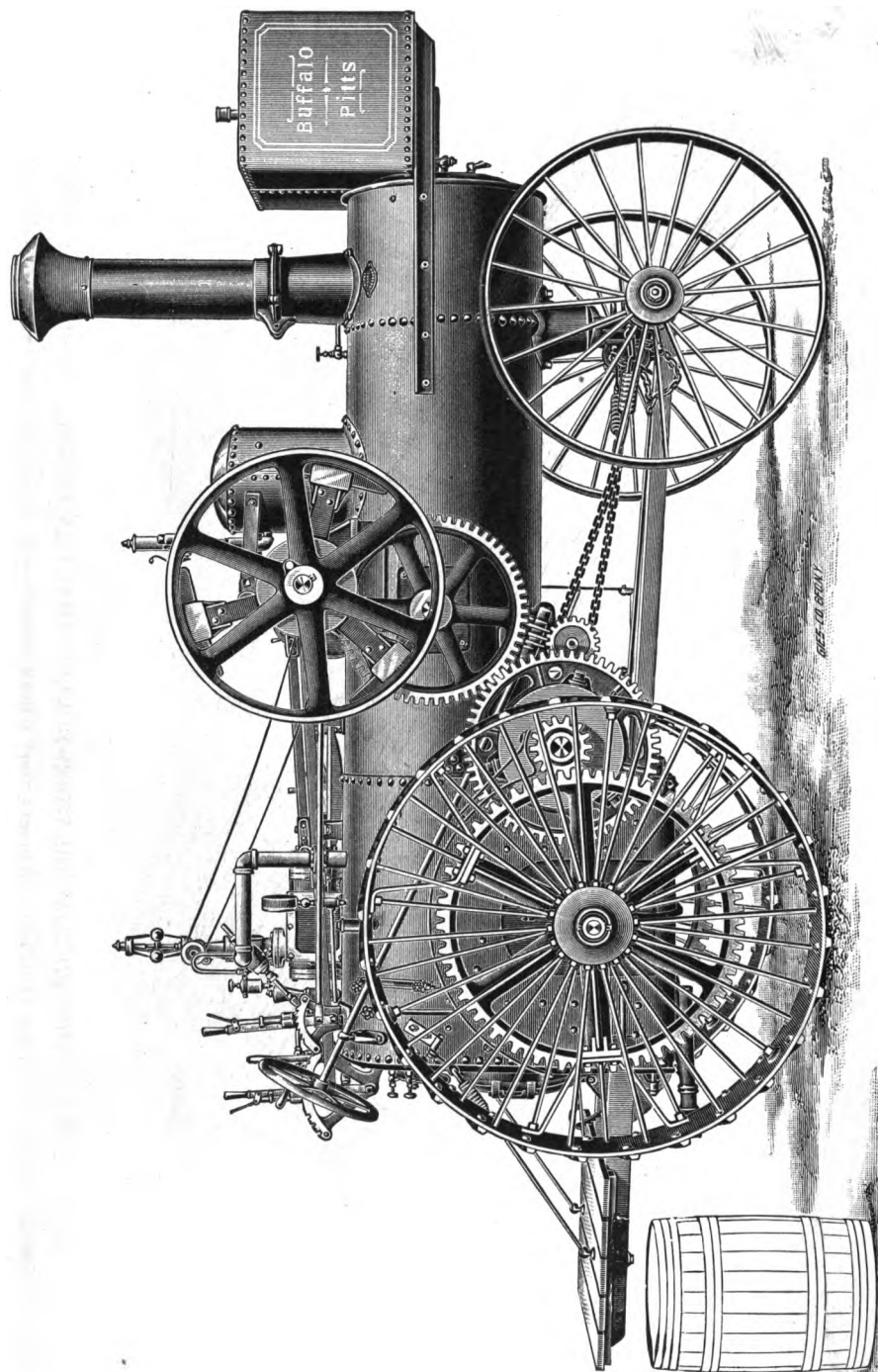


**10 TO 12-HORSE POWER COAL OR WOOD-BURNER TRACTION. LEFT-HAND VIEW.**

**With Friction Clutch and 12-inch face Wrought Steel Wheels, 60 inches diameter. See page 13 for dimensions, etc.**



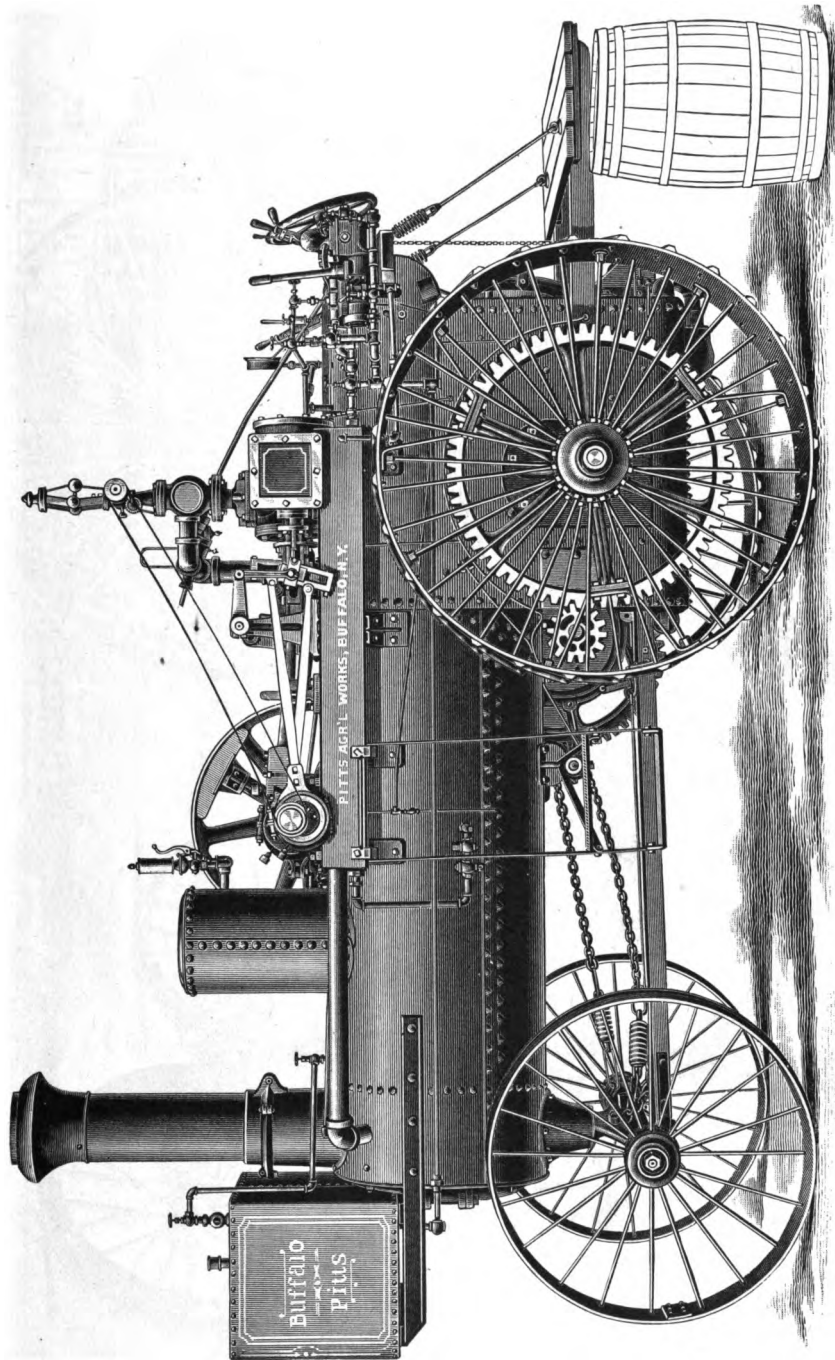
**10 TO 12-HORSE POWER COAL OR WOOD-BURNER TRACTION ENGINE. RIGHT-HAND VIEW.**  
 With Friction Clutch and 12-inch face Wrought Steel Wheels, 60 inches diameter. See page 12 for dimensions, etc.



**15-HORSE POWER COAL OR WOOD-BURNER TRACTION ENGINE.**

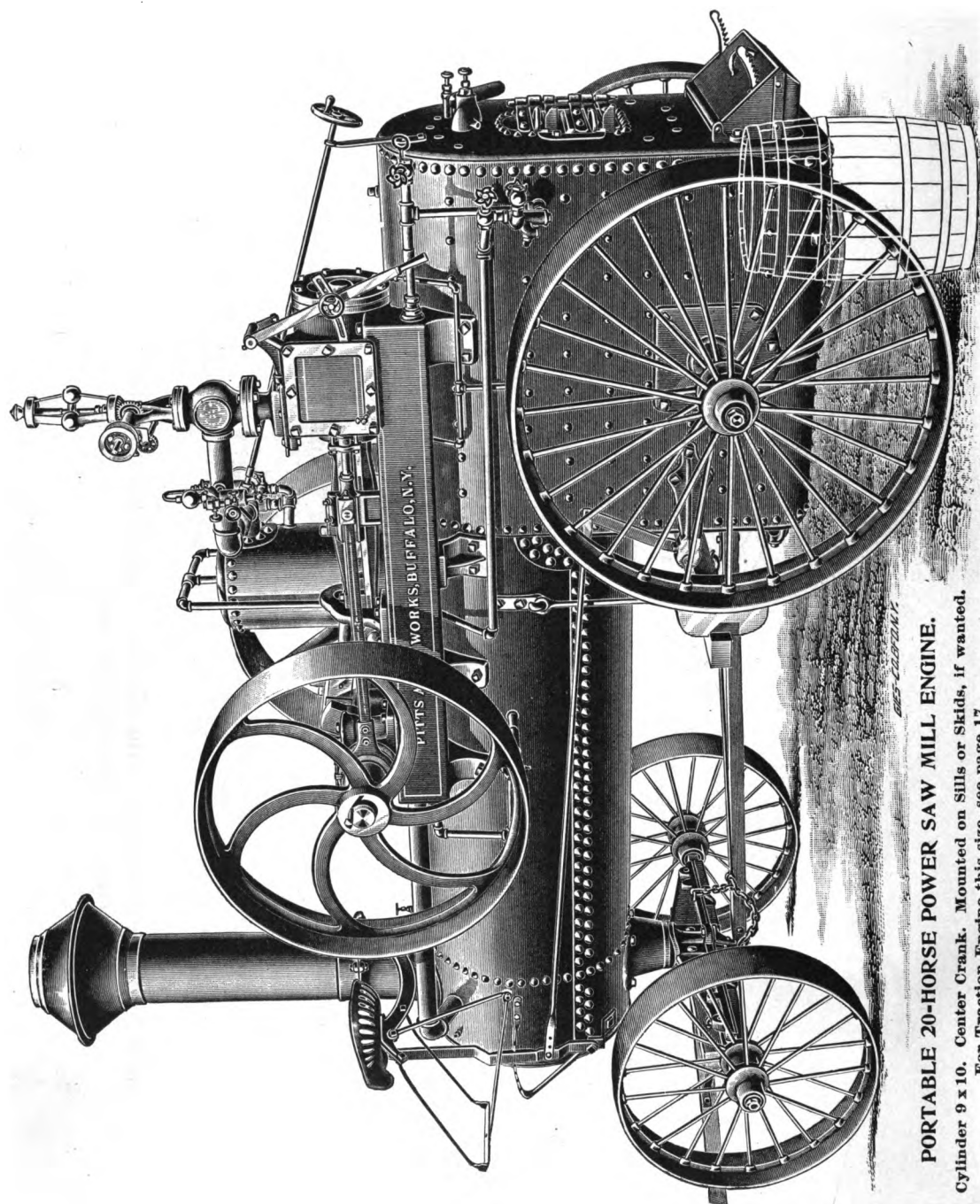
With Friction Clutch, 16-inch Wrought Steel Wheels, 66 inches diameter. See page 13 for dimensions.





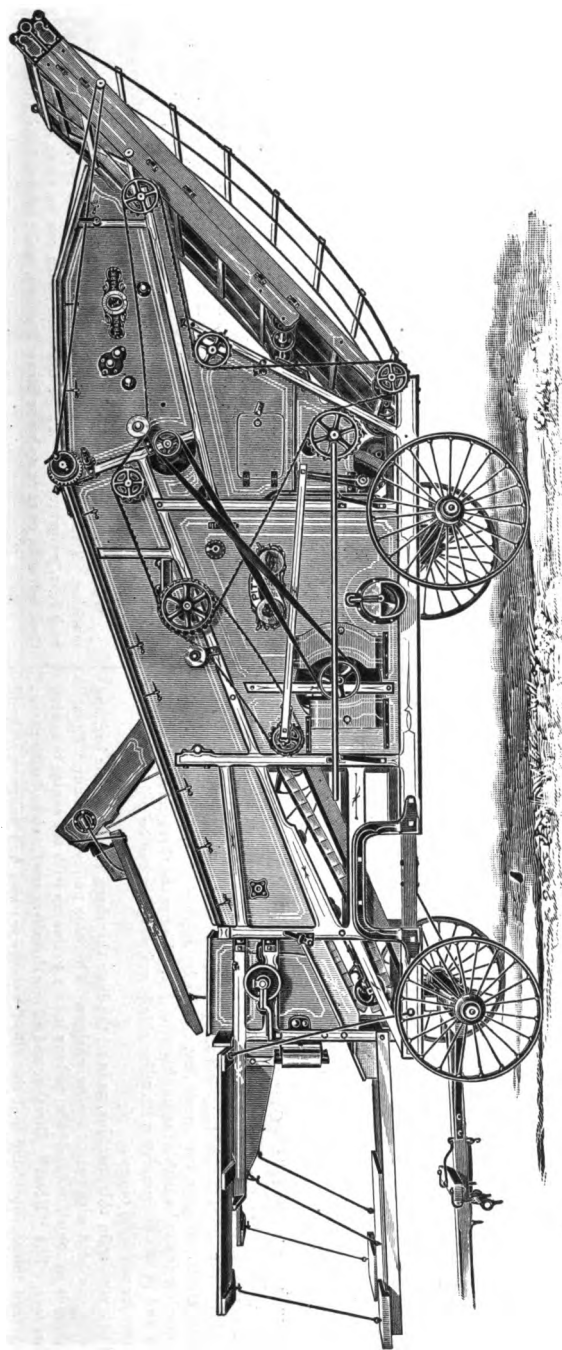
**NEW 20-HORSE POWER COAL OR WOOD-BURNER TRACTION ENGINE. LEFT-HAND VIEW.**

**With Friction Clutch, 18-inch Wrought Steel Wheels, 66 inches diameter. See page 12 for dimensions.**



PORTABLE 20-HORSE POWER SAW MILL ENGINE.

Cylinder 9 x 10. Center Crank. Mounted on Sills or Skids, if wanted.  
For Traction Engine this size, see page 17.



### TWIN FAN "RIVAL" THRESHER. BAND. RIGHT-HAND VIEW.

Sizes: 24 x 40, 28 x 44, 32 x 48, 36 x 52 and 36 x 56.

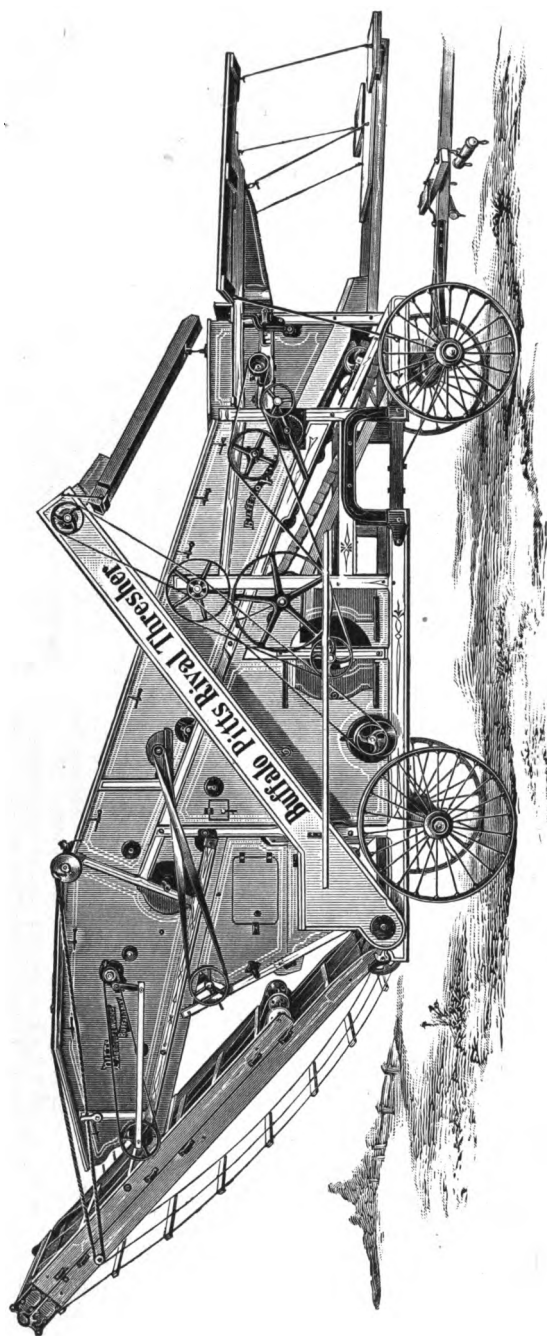
**"RIVAL" THRESHERS.**—In perfecting the Buffalo Pitts "Rival" Thresher, we have kept in view the following points:

Weight of machine, our "Rival" Thresher being a very light machine in comparison with its capacity; reducing the number of belts, so that our machine is driven by a less number of leather belts than any other on the market; keeping the cylinder near the ground, so as to avoid high pitching of bundles; lowering the top of the machine so that it will go into any barn where barn threshing is done; simplicity of construction of every part; introduction of sprocket chains to take the place of belts, thereby reducing the liability of breakage and enabling a large sized machine to run with very much less power than when the whole machine is belted with tight leather belts; and, finally, the greatest possible perfection of cleaning and separating grain.

The Buffalo Pitts "Rival" Thresher has been on the market so many years and is so favorably known all over the United States, that it hardly seems necessary to give a long description of it. The views on pages 19 and 20 are taken directly from photo-

graphs of the 1894 "Rival" Thresher, and show exactly how the machine looks and how it is constructed and belted. On the right-hand side of the machine all the shafts are driven with sprocket chains except one, viz., the belt driving the twin fan from the fan shaft. These sprocket chains are never taken off the machine, require little or no care, and are very long-lived in comparison with belts. We were the first to adopt them on threshing machines, and have therefore brought this method of driving to greater perfection than any other manufacturer. On the left-hand side of the machine are the leather belts. They are all extra wide and made of strictly first-class, oak-tanned stock.

For the season of 1894, our "Twin Fan Rival" is practically the same as last year, a few slight changes only being made in the adjustment of the machine. After leaving the cylinder, the straw is delivered on to the grain belt and passed under two beaters, and is then carried over the picker and dropped upon the straw rake. This straw rake runs to the end of the machine and over the fan placed inside it, so that the blast blows



### TWIN FAN "RIVAL" THRESHER. BAND. LEFT-HAND VIEW.

Sizes: 24 x 40, 28 x 44, 32 x 48, 36 x 52 and 36 x 56.

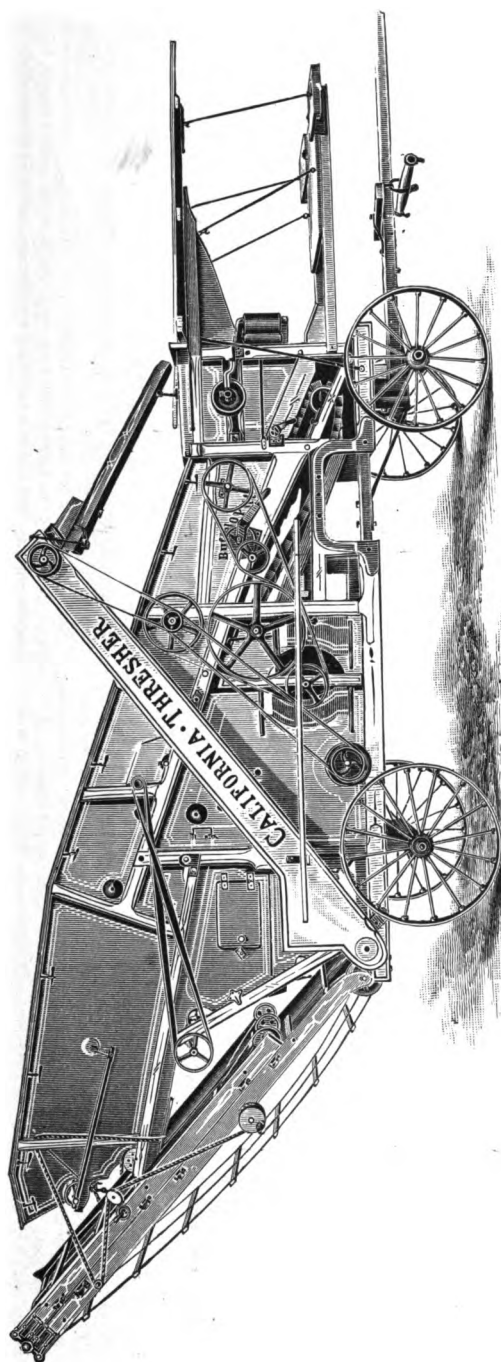
["RIVAL" THRESHERS, CONTINUED.]

out through the straw rake. Over the twin fan is placed a set of fingers, through which the blast also blows. These fingers oscillate and toss the straw, which is caught by the blast. Before reaching the fingers the straw is carried over an oblong picker. We find that the use of the blast at this point greatly assists the separation of the grain from the straw. We are convinced that the coming method of separating grain from the straw is going to be with a fan on this principle. We use the three-cornered picker at the end of the grain apron with adjustable boxes, so that it can be adjusted in any direction for any kind of grain.

The cylinder in this machine, as in all the Pitts threshers, is nine double bar, and the teeth are held with patent spring washers. The main pulley on all our "Rival" Threshers is on the right-hand side, making it easy to line up with the engine in setting the thresher. The "Rival" Thresher and all our threshers are furnished with patent folding feed tables, illustrated and described on page 27; also belt guide on all band

machines and concave adjusters. In all "Rival" machines we put geared stacker raisers, making it most easy to raise and lower the stacker. All shafting and boxes are extra large and convenient oil cups are furnished on all boxes. Floor under grain belt on all machines. White ash frames used exclusively on all machines, and the workmanship and finish of this season compare most favorably with that of any other threshers on the market. We believe that the Twin Fan "Rival" Thresher is the finest machine of this kind we have ever built, and that it will only add to the popularity of this widely-known Buffalo Pitts Thresher.

We call attention particularly to the extra width of our large-sized "Rival" machine. This season we make two sizes with a 36-inch cylinder, viz., with 52 and 56-inch rear, respectively. These machines, with our 10 to 12, 15 or 20-horse Traction Coal Burners, or 12 or 15-horse Straw Burners, make splendid threshing outfits.



**"CALIFORNIA" THRESHER. LEFT-HAND VIEW.**

**Sizes : 36 x 56 and 40 x 60.**

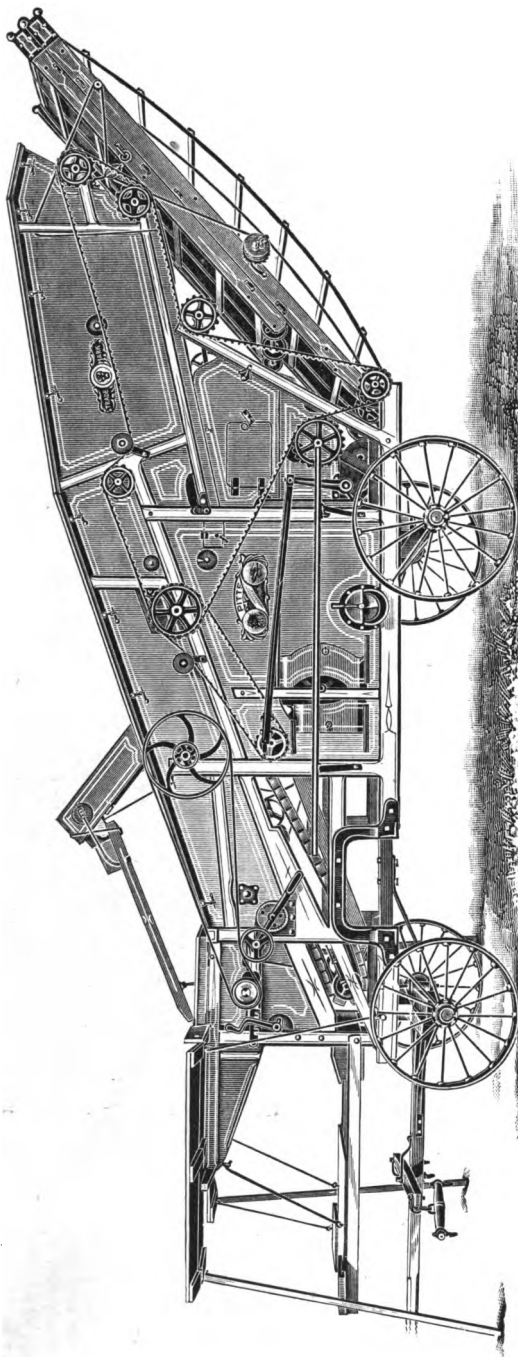
**"CALIFORNIA" THRESHERS.**—The illustrations of these machines, on pages 21 and 22, are made directly from photographs of our 1894 "California" Threshers, and they therefore give an exact representation of the machines we are building for the Northwest this season. Many thousands of these machines may be seen in operation in the field, during the harvest season, throughout the following territory: California, Oregon, Washington, North and South Dakota, Minnesota, Western Wisconsin and Northern Iowa. We claim that the leading machine in all this territory bears the name of "Buffalo Pitts California Thresher," and we also claim that no machine built has such a reputation for heavy work and great capacity.

These machines are built for heavy work and have immense capacity. The frame is of strictly first quality white ash, securely bolted together, and is extra heavy. A year ago we adopted, on this machine, sprocket chains, doing away with the cross belt, and we have been much pleased with the result. The machine runs with less power

and the chains are a permanent part of the machine; what leather belts we do use are extra wide, and are of first quality, oak-tanned stock. All the shafts in the machine are very heavy and the pulleys carrying the belts, broad and leathered where needed.

These machines for the coming season are practically the same as in 1893. We put two full length straw rakes at the end of the machine, one over the other. After leaving the cylinder the straw passes under two beaters, over the three-cornered picker, and drops on to the straw belt. This belt runs the entire length of the machine. Being coarse, it allows a great quantity of grain, straw and chaff to drop through, and this is dragged back and delivered on the lower of the two belts. This belt, being finer, allows only grain and fine material to drop through on to the shoe, the straw being carried through to the end of the machine. We had this device in operation in a number of machines last year, and as a result adopt it as the best grain-saving device we have found for our "California" Thresher.





**"CALIFORNIA" THRESHER. RIGHT-HAND VIEW.**

Sizes: 36 x 56 and 40 x 60.

[ "CALIFORNIA" THRESHERS, CONTINUED ]

**ATTACHMENTS FOR "CALIFORNIA" AND "RIVAL" MACHINES.**  
Buffalo Pitts Wagon Elevator, Buffalo Pitts Hand Weigher and Bagger, and Telescope Weigher, all of which are described on pages 23 and 24, furnished on any of the machines we build. Also our new Automatic Band Cutter and Feeder.

With the "California" Threshers we furnish nine double bar cylinder, with our Buffalo Pitts teeth, made under trip hammers and bearing our trade mark, put on with spring washers. We particularly call attention to the quality of our teeth, and claim that no pressed teeth can be compared with those made under trip hammers. All Buffalo Pitts teeth bear our trade mark, and can therefore be easily distinguished from

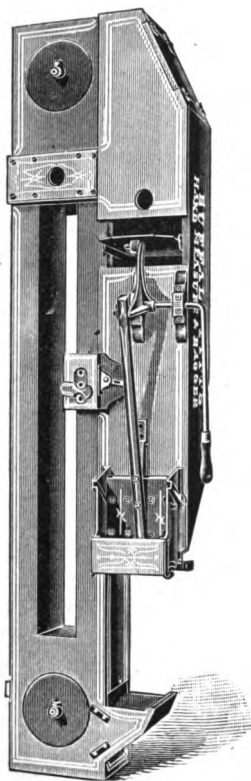
drop-forged teeth. We furnish with all our machines 18-foot stacker. Longer stackers furnished when wanted.

Wagons on our "California" Threshers have 5-inch tire, and all axles on "California" machines we make this season of iron instead of wood. We have disregarded expense in this matter, believing that iron axles for these heavy machines will be found much more durable.

Our 40-inch "California" Thresher, with our 18-horse traction straw-burner engine, is not only the largest threshing outfit built in the United States, but has the greatest capacity, and makes a threshing rig that any man may be proud of.

## BUFFALO PITTS HAND MEASURER AND BAGGER.

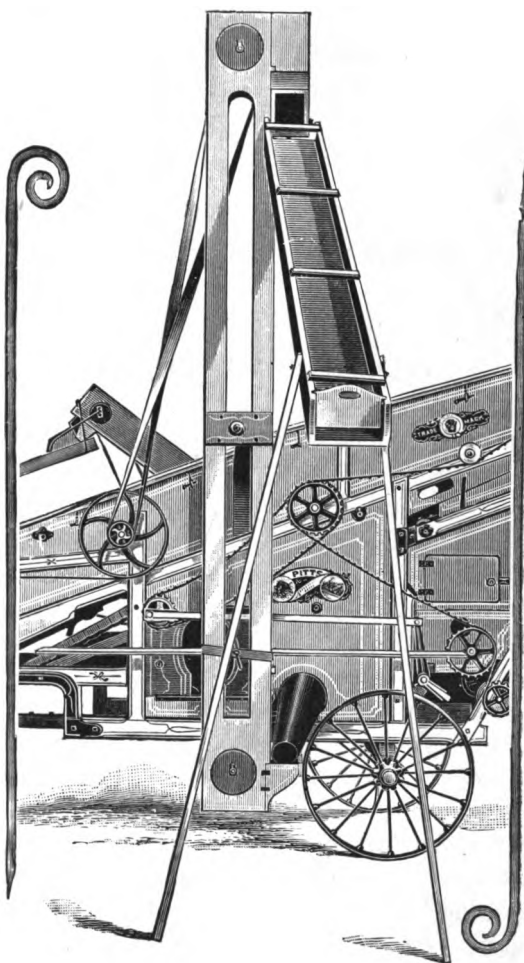
This is the simplest and most perfect hand measurer yet put on the market. It measures either  $1\frac{1}{2}$  bu. or 2 bu. of grain by adjusting a board inside the measure box, and also tallies each bag accurately. There are no parts to get out of order, as everything connected with it is most durable and of the simplest possible form. The lower slide door rising away from the lower opening, makes it impossible for any grain to lodge and prevent closing the door, so that no leakage occurs when the box is next filled. We guarantee this measurer in every particular, and know it will give the very best satisfaction. It can be connected to any machine we build.



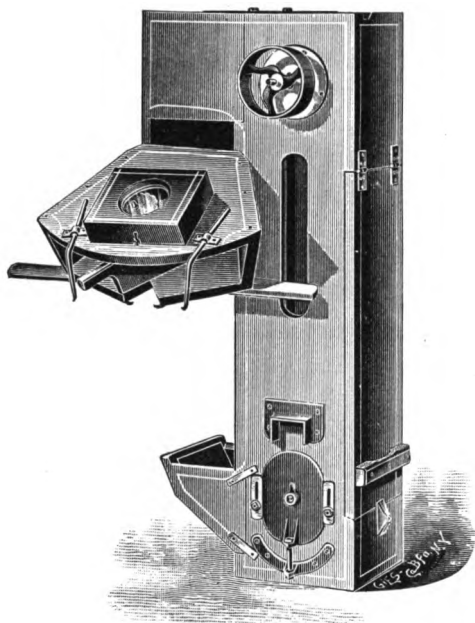
**HAND MEASURER AND BAGGER.**

## WAGON ELEVATORS.

We were the first to introduce wagon elevators on our largest Northwestern machines. They are now generally in use on the best makes of machinery, but for the Buffalo Pitts Wagon Elevators we claim many points of superiority. The grain is delivered into the side instead of center of elevator, thus avoiding any possibility of clogging. The cups are extra wide and deep, and the axle over the top of machine so carries the elevator that it can be transported from place to place without taking it off the machine. We have made and sold hundreds of these machines and they have all been successful.



**BUFFALO PITTS WAGON ELEVATOR.**



**BAGGER WITH TALLY SPOUT.**

### TELESCOPE WEIGHER.

We invite your careful inspection of the Telescope Grain Weigher, for threshing machines, and beg to call your attention to a few of the principal merits it possesses over all similar machines.

It saves time and wages, and weighs and tallies every bushel of grain.

It keeps grain clean, prevents wasting, saves the board and wages of two or three men. Being constructed of steel and malleable iron, it is light, durable, and will not become season-cracked or warped by hot winds and changeable weather.

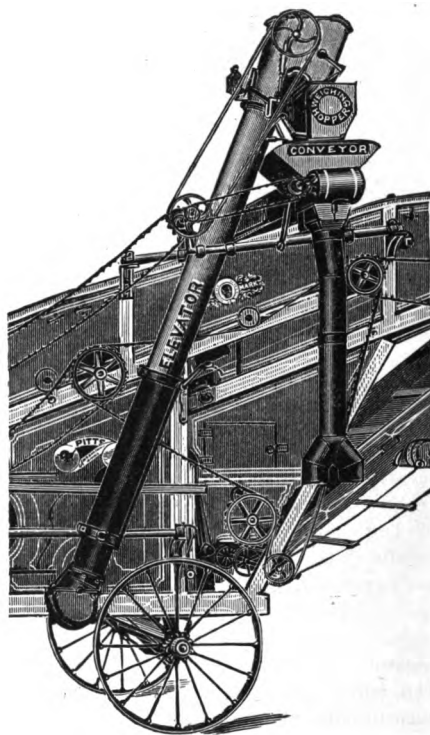
*It is easily attached.* The elevator can be lengthened or shortened to fit any thresher. The only weigher made that can be so adjusted.

*The capacity is sufficient* to promptly handle all kinds of grain, in large or small quantities, wet or dry, without clogging. *Very little power is required to operate it.*

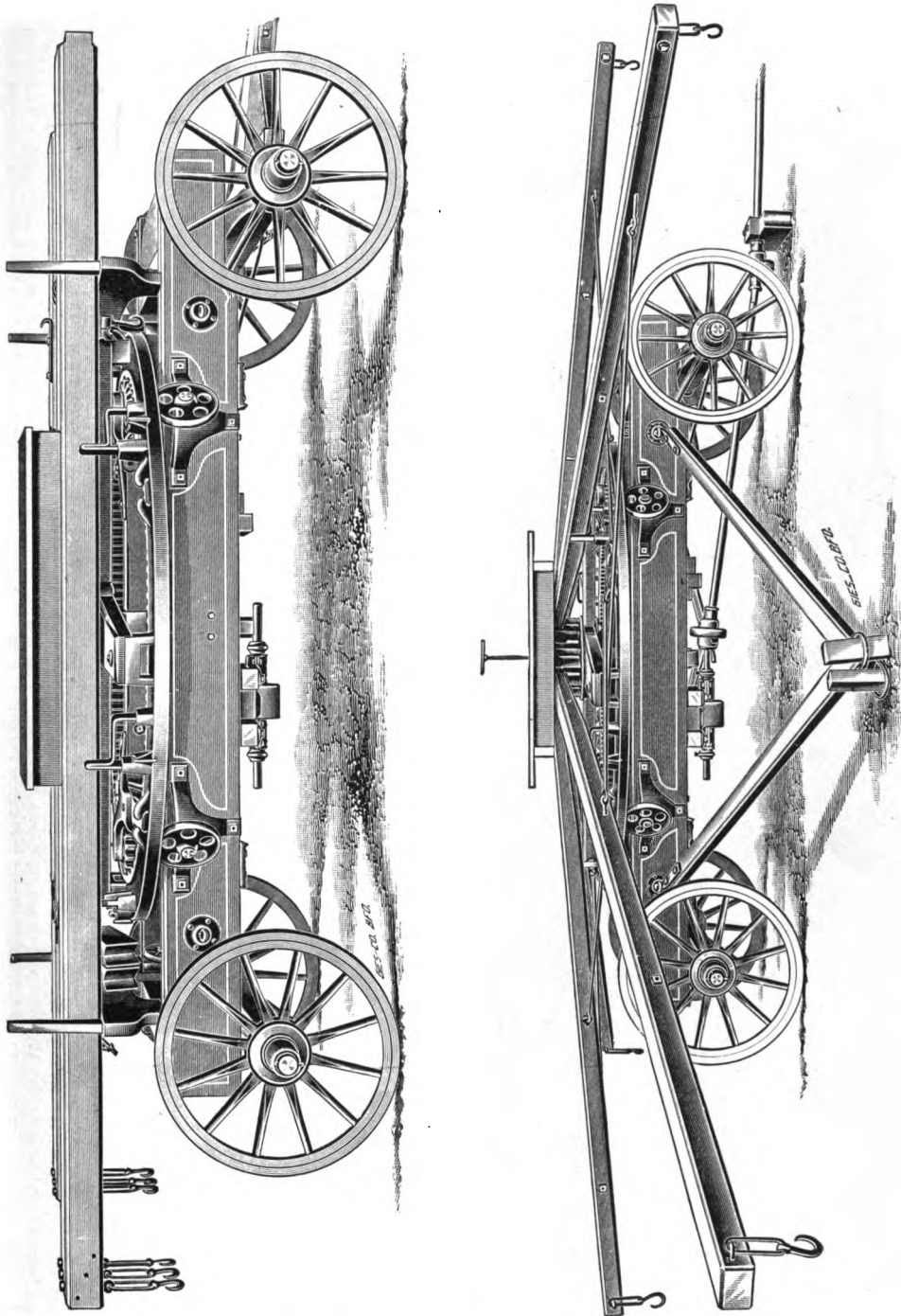
*The weighing device* is not affected by the vibration of the threshing machine, and is absolutely correct.

### BUFFALO PITTS BAGGER WITH TALLY SPOUT.

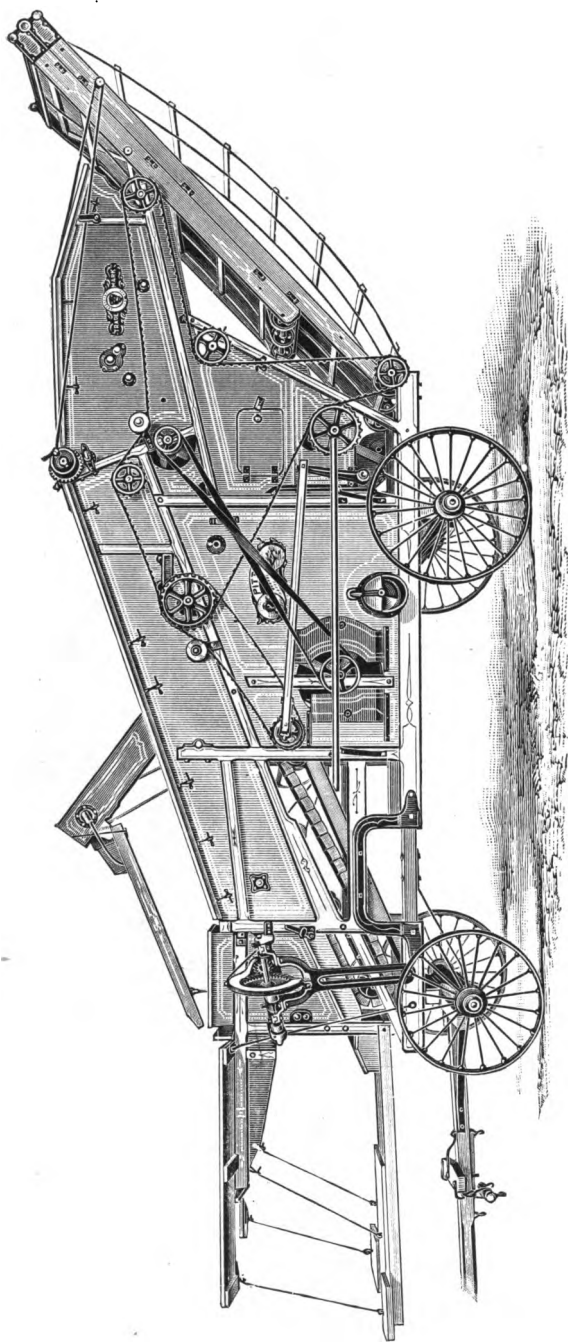
The grain is delivered from the grain conveyor by a spout into one side of the bagger, instead of the center. This allows the bagger to be raised much higher from the ground, so that it can be carried on the machine without taking it off when the machine is moved from place to place; it also increases the capacity of the bagger very greatly, and does not allow it to clog up. We use extra wide and deep cups, and the bagger is light and has capacity for handling all the grain that our largest sized thresher can thresh in one day.



**TELESCOPE WEIGHER.**



**BUFFALO PITTS HORSE POWERS.**



### GEARED "RIVAL" THRESHER, FOR USE WITH BUFFALO PITTS MOUNTED HORSE POWERS.

All our geared machines are furnished with our new single gear, which is the strongest and most complete gear ever put on any threshing machine. It consists of a large bevel wheel, strongly cast, with braces and a bevel pinion on the cylinder shaft. These are all hung in an iron frame with adjustable boxes, and speeded to run with our improved horse powers. We have paid great attention to this gear, and believe it will be found to meet all requirements.

Since the introduction of the mounted power, the superiority of the BUFFALO PITTS to all other PITTS POWERS has been demonstrated. The BUFFALO PITTS MOUNTED POWERS are the only ones which may be honestly called mounted powers. They are designed in all their parts for use on wheels. This unity of design and simplicity of construction result from planning the power from the beginning as a mounted power, insuring strength and greatest ease of draft. In the BUFFALO PITTS MOUNTED POWERS the lower cross girts are of cast iron instead of wood, rendering the frame of the power firmer and stiffer, and affording a more substantial support for the bevel wheels and journals. The step castings on which the bevel wheels and their steel journals are mounted, rest in hollows of the cast-iron girts, and are fastened to the girts by bolts running through slotted holes in the step castings.

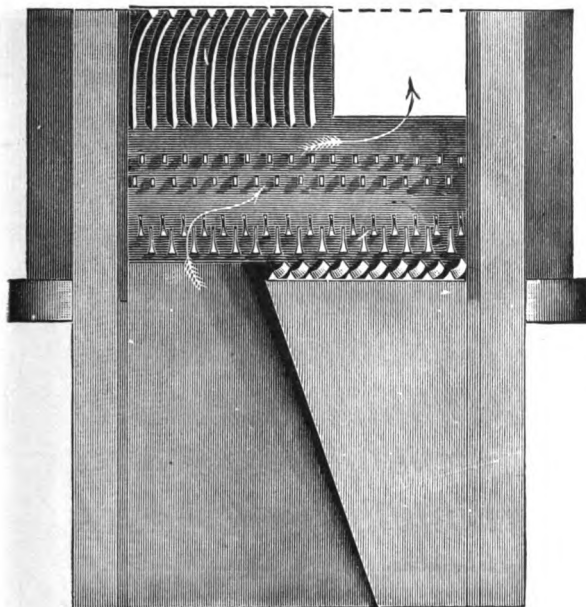
*SPEED.—In addition to the old speed of seventy-eight revolutions, we put on all our*

POWERS OUR NEW DROP GEAR, which combines the following advantages: The drop gear has a speed of 103 revolutions, so as to run our new geared threshers as above, or any other requiring 103 revolutions of tumbling rod. The line shaft can be hitched to either end, so that the power can be drawn up in line with the threshing machine, without the bother and difficulty of backing the team to get in line. Remember, that the powers still have a hitch of 78 revolutions.

**BABBETTED BOXES.**—This season we fit all the line shaft boxes on powers with new babbitted boxes. These will fit any line shafts already put out and will add to the running and durability of the powers.

### BUFFALO PITTS "RIVAL" HORSE-POWER RIGS.

Horse-power threshing outfits are again coming into general use, and we are prepared to say that our 28 or 32-inch "Rival" Thresher with single gear and sprocket chain, belts is the best horse-power machine on earth; and there is one reason in particular for this, viz., that the machine drives with so little power. We believe the "Rival" horse-power rig that we build to-day will drive with one less team than any other machine we have before manufactured. If you want a horse-power outfit, buy the "Rival" and you will get something that will do you and ourselves credit.



### FLAX THRESHING.

The rapidly increasing culture of flax has made flax threshing an important item in a thresher's work, even to such an extent, in many sections, that to thresh flax is expected by the purchaser of a machine. We were among the first to give special attention to the matter of flax threshing, and to adapt our machine for doing this important work. The best grain thresher is the best machine on which to put attachments to make the best flax thresher; and having the best grain thresher, it was easy to arrange it to be the best flax thresher in the market. That we have succeeded, that the Buffalo Pitts does the very best of work in flax, is acknowledged by all those who have used them. One thing which gives the Buffalo Pitts its great superiority as a flax thresher is the precaution taken against winding. Wherever there is the least chance for the pliable hemp straw to take a hold, it is sure to do so, and wind and wind until the machine is clogged.

We guarantee that our machines will do a first-class job in this grain when the flax is in fit condition to be threshed, and claim that in many sections of the Northwest the Buffalo Pitts Threshers are the leading machines in flax.

### TIMOTHY THRESHING.

In some sections timothy is a large crop, and the ability to thresh it well may influence the purchaser in the choice of a thresher. To farmers and threshermen in these sections, we wish to say that we have given a great deal of attention to adapting our threshers to this special work, and that either style of our machines will do the very best work in timothy, threshing it all out of the heads, and cleaning and saving it in the very best manner. No other machine will do this work as well as ours.

### CLOVER-HULLING ATTACHMENT.

We show two views of our ingenious Clover-hulling Attachment, which show better than any description the method we adopt. We can furnish this attachment for any of our threshers, and when adjusted, threshermen will have a huller that will not only do as good work as a regular clover-hulling machine, but much faster work. The superiority of the threshers themselves adds greatly to the value of the attachment in hulling clover.

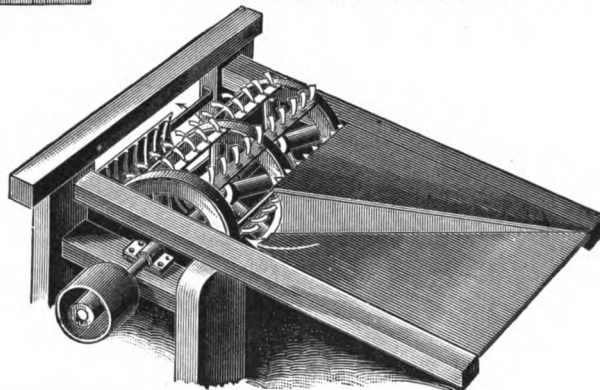
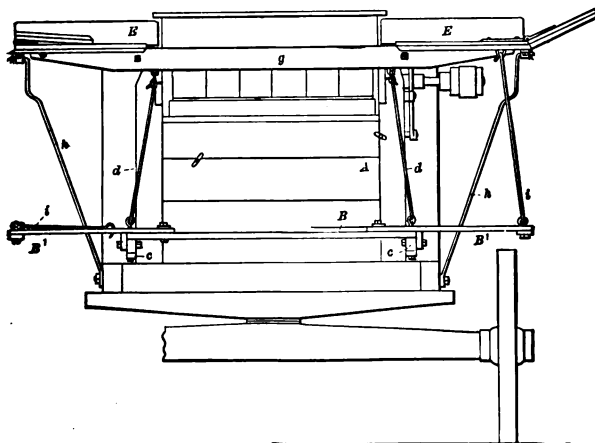


FIG. 3.



### FEED TABLES.

(PAT. MAY 7, 1889.)

The success of our patent Folding Feed Table is assured. Valuable time has been consumed in taking off and putting on the old style tables, when moving from place to place. This we entirely do away with. Each table is made in two parts, and hinged so that it folds towards the center, leaving the tables no wider than the other parts of the thresher. Then the whole table is hung to the cylinder arms in such a manner that the table, when folded, can be moved forward 18 inches, so as to project no further than the cylinder arms. This is done without removing the iron braces or supports. The feeder stand and band cutter stands are hooked up to the cylinder arms, and the whole apparatus, in a moment's time, is ready to move, and is entirely out of the way of the horses. The illustration fully explains the construction of these tables. Fig. 3 particularly illustrates the patent tables. Remember that all our threshers, "California" as well as "Rival," are provided with these, without extra charge, and remember, too, that they are patented, and that no other machine is furnished with them.

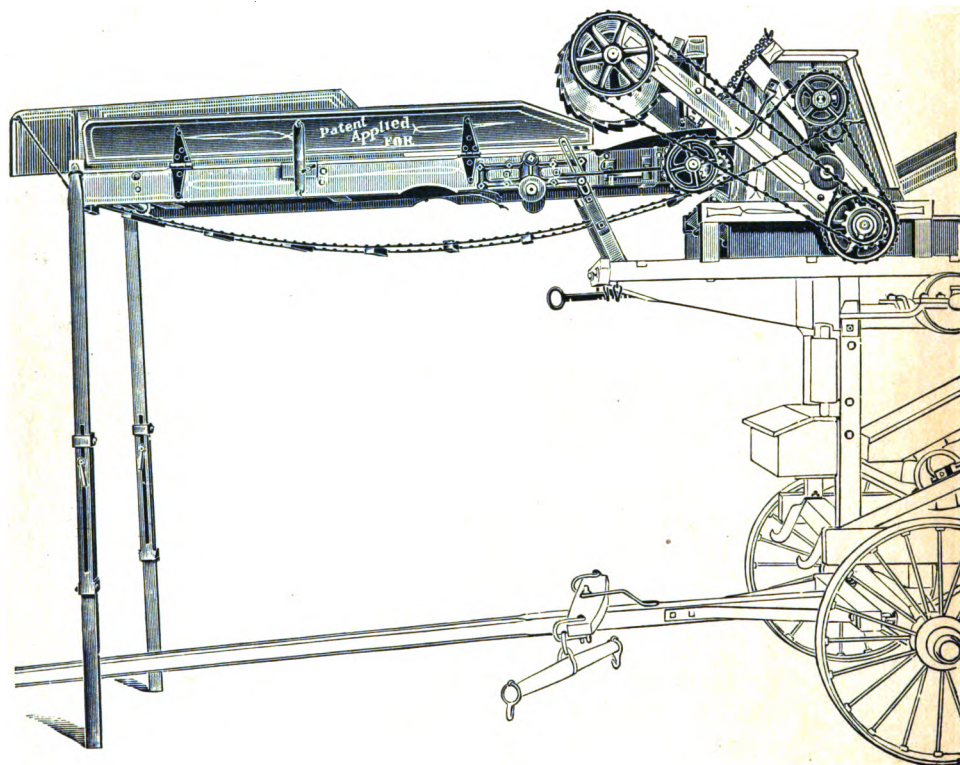


## BUFFALO PITTS AUTOMATIC BAND CUTTERS AND FEEDERS.

We show illustration of the right-hand side of our new band cutter and feeder. This machine has been in the field for the last six years and has been so far perfected that we are prepared to furnish them with any size of threshing machine that we build. The feeder is very simple in construction, light in weight, and very strong in all its parts. The great objection to band cutters and feeders heretofore has been the band-cutting device. The circular saws in our feeder have notched edges, which catch the string on the bundle and carry it against a smooth knife, making it

absolutely impossible to miss the cutting of the band of a single bundle. The saws are adjustable up and down.

During the past season we built a number of these machines and they gave universal satisfaction. One was run for over two months on all kinds and conditions of grain in New York State, and two were run with the greatest possible success in North Dakota. In the hands of intelligent men, we believe that the Buffalo Pitts Band Cutter and Feeder will be found to do more and better work than can be done by hand feeding.





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